

LIBRARY
RECORDS
JAN 29 1954
U. S. Department of Agriculture



Cultivated Blueberries — Actual Size

Cultivated Blueberries

The Most Promising Development
in Commercial Fruit Growing
of the Century

Dr. Keefe's Blueberry Plantations, Inc.

Grand Junction, Michigan



"Over Your Head in Blueberries"
A Harvesting Scene at Dr. Keefe's Blueberry Plantation

Cultivated Blueberries

In the early colonial days and until the opening of the present century, wild blueberries were very plentiful and greatly prized by the early settlers and the Indians. During the past 30 years there has been a gradual reduction in the supply of wild blueberries. This has been due to the clearing of many areas occupied by these plants and using the land for other purposes. Competing trees and shrubs have also crowded out blueberry plants in many places. Consequently there is an inadequate supply of blueberries at present with correspondingly high prices. This condition is likely to prevail for many years.

Soil Requirements

The blueberry plant requires a soil that is very acid, preferably one with a pH range of 4.4 to 5.1. The prospective grower should have his soil tested by his county agent or experiment station.

Proper moisture conditions are also important. Tests have shown that plants grow best where the water table can be maintained from 14 to 22 inches below the surface. It is not always possible to provide this ideal condition, but for practical purposes the water level in the soil should at least not be lower than 10 to 12 inches from the surface during the spring months. Too much water, especially during the growing season, can be as injurious as too little.

Deviations from these requirements of acidity

and moisture are reflected in poorer growth and lower yields, and in extreme cases in the death of the plants.

Climatic Requirements

Blueberries can be divided into two general classes, highbush and lowbush. The highbush is the only one with which much improvement work has been done. It is found growing naturally in Michigan about as far north as Saginaw Bay; in central and southern New York; in southern New Hampshire, Vermont, and Maine. It is also found generally where the soil is suitable in Massachusetts, New Jersey, and in places as far south as North Carolina. There are also some highbush blueberry plants being grown in the vicinity of Puget Sound in Washington. Undoubtedly there are other places where climatic conditions will permit the growth of the highbush blueberry provided soil conditions are suitable.

Locations and Sites

For commercial culture the plantation should be located where pickers may be obtained and where markets are within a reasonable distance over good roads. Pockets or "kettle-holes" should be avoided, due to danger from frost. Large open areas are freer from this danger.

Varieties

Several good varieties of improved blueberries are now available. They ripen in succession, providing fruit over a period of nearly eight weeks.

↘ **JUNE** One of the earliest varieties. Ripens its berries in a short season. Berries of good size and quality. Difficult to propagate. Somewhat lacking in vigor and susceptible to leaf-spot in Michigan.

↘ **STANLEY** Ripens in early-midseason. Upright, open bush. Berries are large and of exceptionally good flavor. Moderately productive.

↘ **RUBEL** Ripens about 14 to 18 days later than June. Vigorous, upright bush that is very productive. Berries are moderately large, light blue, attractive, and of good quality, if allowed to ripen thoroughly, but sour if picked too soon. The berry is very firm and therefore an excellent shipper. Most widely grown commercial variety.

↘ **JERSEY** Ripens a few days after Rubel. Bush semi-upright and very vigorous. Fruit large and firm, making it an excellent shipper. A promising new variety of about the same season as Rubel.

↘ **ATLANTIC** A new variety introduced by the U. S. D. A. Ripens about with Rubel. Large light blue fruit, good shipper.

↘ **PEMBERTON** New variety introduced by the U. S. D. A. Ripens about with Rubel. A very large, vigorous upright growing bush with very large, light blue berries.

↘ **BURLINGTON** Another new U. S. D. A. introduction. Ripens later than Rubel. A very productive bush and very good shipper. Should lengthen the season.

Pollination

Recent investigations in Michigan indicate that the standard varieties of blueberries will set fruit satisfactorily if planted alone. However, it is wise to set more than one variety in order to provide for a longer producing season.

Care of Plants When Received

When plants are received they should be planted as soon as possible. In the meantime they should be placed in a shallow trench and the roots well covered with soil. They can be held in this manner for two or three weeks. They can also be held safely for several days in a cool cellar.

Planting Suggestions

Various planting distances have been used for the highbush blueberry. Ten feet by four feet has been a common distance in Michigan. Nine feet by five feet is also a good distance. For home planting, shorter distances can be used. Blueberry plants live many years under normal conditions and for commercial planting should not be crowded.

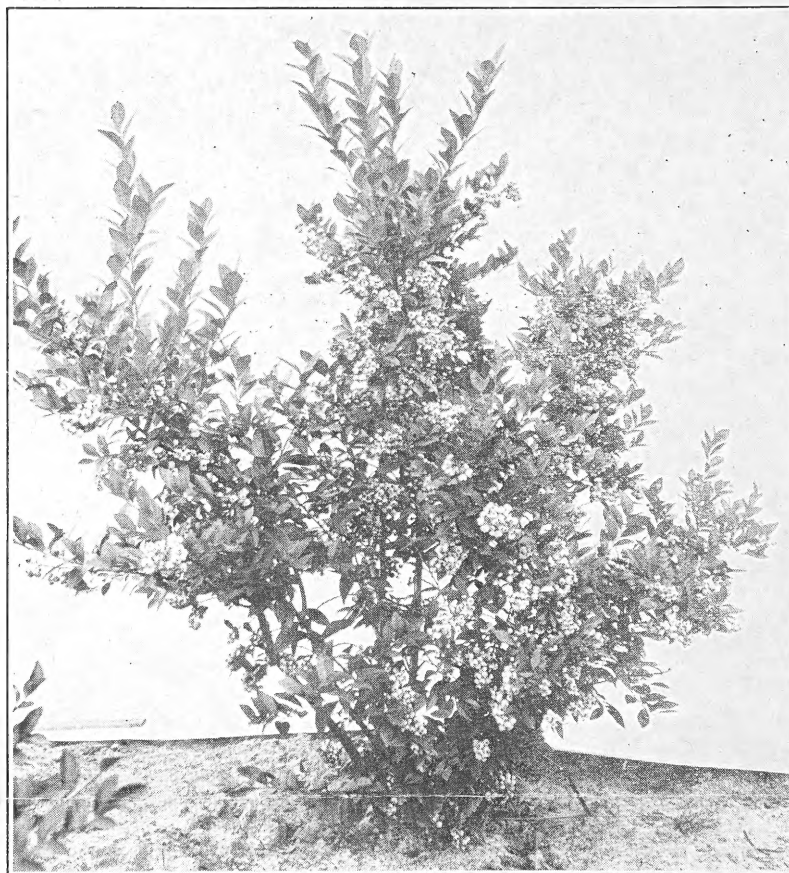
The plants should be set a little deeper than they were in the nursery. The tops are usually pruned before shipping, but if not they should be reduced one-half.

Two-year-old plants are best for Spring planting. Three-year-olds for Fall planting.

Cultural Suggestions

The blueberry plant is very shallow rooted and accordingly, cultivation should be shallow. It should be frequent enough to keep down weeds. Cultivation should be continued through the harvesting season if possible. Heavily loaded bushes bending into the row-middles sometimes make cultivation difficult or impossible temporarily. As soon as the harvest is over, a cover crop of some annual crop such as oats, Sudan grass, or mixtures of these or other suitable crops should be sown, unless an adequate weed cover crop can be obtained.

Careful pruning is essential, beginning the third year, if berries of large size are to be produced and annual crops of moderately uniform volume obtained. The pruning consists of removing the bushy, thin wood, and old stems or parts of stems which have declined in vigor to the point where relatively few new shoots at least four to six inches in length are being produced.



A Six-Year-Old Rubel Bush Carrying About
Six Quarts of Blueberries

Yields and Markets

Production begins in a small way the year after planting. A yield of 800 quarts per acre may be obtained the fourth year under good conditions. Plants reach full bearing in from eight to ten years. Average yields on full bearing plants, under good conditions, should range from 2,000 to 3,000 quarts per acre. The bushes are usually of very long life—some plants being known that are probably 100 years or more of age and in good condition.

The blueberry is a very popular fruit wherever it is known, for fresh use, quick-freezing, and canning. It is famous for pies and muffins. Most cultivated blueberries are put up attractively in pint boxes, covered with cellophane. A very large share of the crop in New Jersey, North

Carolina and Michigan is sold through the Blueberry Cooperative Association which has established certain grades and standards which all members must meet. This has proved to be an orderly, efficient and satisfactory method of marketing.

Additional Information

More complete information on blueberry culture may be obtained from the following sources: South Haven Experiment Station (Michigan State College), South Haven, Michigan; New Jersey Experiment Station, New Brunswick, N. J.; Washington Experiment Station, Pullman, Washington; Massachusetts Experiment Station, Amherst, Massachusetts; U. S. Department of Agriculture, Washington, D. C.

**Obtain Your Blueberry Nursery Stock from the Oldest
and Largest Cultivated Blueberry Plantation
in the Middle West**